

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) An AC/AC power converter configured to be mounted on a substrate, the AC/AC power converter comprising:
a plurality of input ends;
a plurality of output ends;
first and second direct-current power lines;
a multiple-phase converter including
a first diode having its anode connected to one of said input ends and its cathode connected to said first direct-current power line,
a second diode having its anode connected to said second direct-current power line and its cathode connected to said one of said input ends connected to the anode of said first diode, and
a switching part selectively connecting another one of said input ends to either said first direct-current power line or said second direct-current power line,
at least one phase of the multiple phase converter consisting only of said first diode and said second diode;
at least one smoothing capacitor connected between said first direct-current power line and said second direct-current power line; and
a multiple-phase inverter connected between said first and second direct-current power lines and said plurality of output ends.

2. (Previously Presented) The AC/AC power converter as set forth in claim 1, wherein
said multiple-phase converter is a three phase converter,
said smoothing capacitor includes two smoothing capacitors, and
said multiple-phase inverter is a three-phase inverter.

3. (Previously Presented) The AC/AC power converter as set forth in claim 1, wherein

said smoothing capacitor includes two smoothing capacitors connected in series between said first direct-current power line and said second direct-current power line, and said switching part includes

- a third diode having its cathode connected to said first direct-current power line;
- a fourth diode having its anode connected to said second direct-current power line;
- a transistor connected between cathode of said third diode and anode of said fourth diode; and

- a diode bridge establishing a connection of said another one of said plurality of input ends, a point between said two smoothing capacitors, and the emitter and collector of said transistor.

4. (Previously Presented) The AC/AC power converter as set forth in claim 3, wherein

the point between said two smoothing capacitors and one of said plurality of output ends are connected.

5. (Previously Presented) The AC/AC power converter as set forth in claim 1, wherein

said one of said plurality of output ends and said another one of said plurality of input ends are connected.

6. (Previously Presented) The AC/AC power converter as set forth in claim 1, wherein

said switching part includes

- a third diode having its cathode connected to said first direct-current power line;
- a fourth diode having its anode connected to said second direct-current power line;
- a transistor connected between cathode of said third diode and anode of said fourth diode;

- a fifth diode having its anode connected to said another one of said plurality of input ends and its cathode connected between the cathode of said fourth diode and said transistor; and

a sixth diode having its anode connected between the anode of said third diode and said transistor, and its cathode connected to said another one of said plurality of input ends.

7. (Previously Presented) The AC/AC power converter as set forth in claim 6 further comprising

a reactor connected between said first direct-current power line and said second direct-current power line; and

a seventh diode provided on said first direct-current power line and having its anode connected to said smoothing capacitor and its cathode connected to said reactor.

8. (Previously Presented) The AC/AC power converter as set forth in claim 6, further comprising

a seventh diode having its anode connected to said second direct-current power line and its cathode connected to said first direct-current power line; and

a reactor provided on said first direct-current power line and connected between said seventh diode and said smoothing capacitor.

9. (Previously Presented) The AC/AC power converter as set forth in claim 1, wherein

said smoothing capacitor is connected outside on said substrate.

10-34. (Cancelled)